



U.S. Environmental Protection Agency Applicability Determination Index

Control Number: 9700142

Category: NSPS
EPA Office: SSCD
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Title: SOCMI Product/CMPU Definitions
Recipient: Hiley, Raymond
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Subparts: Part 60, III, SOCMI Air Oxidation Units
Part 60, NNN, SOCMI Distillation Operations
Part 60, VV, SOCMI Equipment Leaks

Abstract:

Q: What is the definition of "product" for purposes of applicability of the NSPS for SOCMI (40 CFR Part 60, Subparts VV, III, and NNN)?

A: "Product" also represents by-products, co-products, and intermediates. EPA considers either of the following downstream uses as indicative of the production of a listed chemical as a "product": 1) production for sale as that listed chemical; or 2) use in another process where that listed chemical is needed.

Q: What is the definition of "process unit" for purposes of the NSPS SOCMI regulations?

A: Although the definition is not explicitly stated in the NSPS SOCMI regulations, the definition of "chemical manufacturing process unit" in the NESHAP for SOCMI (40 CFR Part 63, Subpart F) reflects the Agency's intent regarding the specific equipment included as part of a process unit.

Letter:

Mr. Raymond D. Hiley
Goodwin, Proctor & Hoar
Exchange Place
Boston, MA 02109-2881

Dear Mr. Hiley:

This letter is in response to your inquiry dated February 23, 1994, regarding the applicability of new source performance standards (NSPS) for equipment leaks, air oxidation, and distillation operations in the Synthetic Organic Chemical Manufacturing Industry (SOCMI) [40 CFR Part 60, Subparts VV, III, and NNN, respectively].

In your letter you provide two hypothetical examples involving the production of "Substance A," which you describe as a listed chemical to which the relevant standard applies.

Example 1: Substance A is produced within a relevant unit as a non-isolated intermediate and is reacted within the same unit to produce the desired chemical product ("Substance B"). Except for residual unreacted amounts, Substance A is not transferred to, or used in, any other process unit. Substance A is not sold or used in any way after the relevant unit.

Example 2: Substance A is produced within the relevant unit as an undesired material that is discarded as part of the waste stream from the unit. Substance A is not sold or used in any other way.

As your letter correctly states, the applicability of NSPS Subparts VV, III, and NNN depends on whether a listed chemical is produced as a "product." The EPA considers the word "product" to also represent by-products, co-products, and intermediates. In determining whether a listed chemical is produced as a product, EPA considers either of the following downstream uses as indicative of the production of a listed chemical as a product: (1) Production for sale as that listed chemical, or (2) use in another process where that listed chemical is needed. However, if a listed chemical is only part of a mixed stream exiting a process unit and cannot be sold or used in another process as the listed chemical, then that chemical is not considered to be produced as a product.

In Example 1, the listed chemical is produced as an intermediate; however, it is not sold or used in any other process. Therefore, we agree with your conclusion that such a process unit would not be subject to NSPS Subparts VV, III, or NNN, provided that Substance B, the final product, is not a listed chemical.

In Example 2, Substance A is produced within the relevant unit as an undesired material that is discarded as part of the waste stream from the unit. As in the first example, Substance A is not sold or used in any other process. Consequently, this process unit also would not be subject to the standards because the listed chemical is not produced for sale as that chemical or used in another process where that chemical is needed.

Lastly, you request clarification on the definition of process unit. Although not explicitly stated in the NSPS SOCMI regulations, the following definition, taken from the National Emission Standards for Organic Hazardous Air Pollutants from SOCMI (40 CFR Part 63, Subpart F) reflects the Agency's intent regarding the specific equipment to be included as part of a process unit.

Chemical manufacturing process unit means the equipment assembled and connected by pipes or ducts to process raw materials and to manufacture an intended product. For the purpose of this subpart, chemical manufacturing process unit includes air oxidation reactors and their associated product separators and recovery devices; reactors and their associated product separators and recovery devices; distillation units and their associated distillate receivers and recovery devices; associated unit operations (as defined in this section); and any feed, intermediate and product storage vessels, product transfer racks, and connected ducts and piping. A chemical manufacturing process unit includes pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, instrumentation systems, and control devices or systems. A chemical manufacturing process unit is identified by its primary product.

This response has been prepared in consultation with the Emission Standards Division of the Office of Air Quality Planning and Standards. If you should have further questions regarding this determination, please contact Jane Engert of my staff at (703) 308-8677.

Sincerely,

John B. Rasnic, Director
Stationary Source Compliance Division Office of Air Quality Planning and Standards

cc: Jan Meyer
Emission Standards Division